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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,147	07/16/2003	Robert Ian Gresham	18065	1214
26794	7590	11/16/2006		
TYCO TECHNOLOGY RESOURCES 4550 NEW LINDEN HILL ROAD, SUITE 140 WILMINGTON, DE 19808-2952			EXAMINER CAVALLARI, DANIEL J	
			ART UNIT 2836	PAPER NUMBER

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

The examiner acknowledges a submission of the amendment filed on 8/24/2006. The amendments to the figures, specification, claims 1-5, 7 & 8 and cancellation of claims 6 and 11 are accepted.

The previously made objection to the drawings and claims is withdrawn in view of the amendments.

The previously made 112 first paragraph rejection of claims 1-8 and 112 second paragraph rejection of claim 11 are withdrawn in view of the amendments.

### ***Response to Arguments***

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the particular base configuration of the third transistors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The examiner points out that the limitations which are in the applicants arguments do not appear in the presently amended claims, particularly "...at its base to a base of the corresponding third transistor..." does not appear in the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, & 6- 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Miki et al. (US 5,396,131).

In regard to Claims 1 & 9

Miki et al. (hereinafter referred to as Miki)

- A first circuit portion (401) corresponding to a first input port, read on by VA1 & VA2 (Channel 1) (See Figure 10).
- A second circuit portion (402) corresponding to a second input port, read on by the input to transistor gates 301' & 302' (Channel 2) (See Figure 10).
- An output port, read on by  $I_{10}$  &  $I_{20}$  (See Figure 10).
- Wherein each of the first and second circuit portions includes at least one first transistor, read on by a first differential amplifier (301 and 301') providing a portion of an isolation channel, at least a second transistor, read on by a second differential amplifier (303 and 303') providing a portion of a transmit channel, and two third transistors for providing a control bias which selects an input, read on by 305 & 306 and its equivalent in circuit 402 (See Figure 10) coupled to each other (via lines  $I_{10}$  &  $I_{20}$ ) and to control voltage source (309).

In regard to Claim 3

- The third transistors (305, 306, and corresponding transistors for circuit 402) of the first and second portions provides a control bias for selecting which of the first and second input ports are coupled to the output port ( $I_{10}$  &  $I_{20}$ ).

In regard to Claim 4, 7, & 8

- The at least one first transistor (301) comprises two transistors (301 & 302) having emitters coupled to each other and coupled to a collector of the third transistor (305) (See Figure 10).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miki et al. and Limberg (US 3,798,376).

Incorporating all arguments above of the switching device taught by Miki, Miki further teaches the use of solid state devices (See Figure 10), but fails to explicitly teach the circuit formed on an integrated circuit.

Limberg teaches solid state components integrated on an integrated circuit (See Column 2, Lines 13-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the switching circuit of Miki into an integrated circuit as taught by Limberg. The motivation would have been the reduced size and weight, increased reliability and economic advantages offered by integrated circuits as opposed to discrete components (See Limberg, column 2, Lines 13-26).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miki et al. and Hester (US 4,460,873).

Incorporating all arguments above of the switching device taught by Miki, Miki teaches amplifiers comprising two transistors but fails to teach them comprising three transistors. Hester teaches the use of amplifiers comprising three transistors in which a Darlington pair (as taught by Miki et al.) is incorporated with two other transistors (96 & 98) in which to create a high gain operational amplifier (See Hester, Figure & Column 4, Lines 25-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the high gain operational amplifier as taught by Hester with the switch circuit of Miki et al. The motivation would have been to provide a more powerful amplifier capable of outputting better gains.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

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Daniel Cavallari

October 30, 2006



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